

Therapeutic stone powder from ecclesiastical sources: supplementary comments

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Abstract

Consecrated earth or stone powder associated with churches dedicated to medieval saints, often of local significance, has particular importance in certain areas of Belgium and the Netherlands. Sources of supply range from the walls and other parts of the fabric of the church and earth from pilgrimage sites, to specially blessed ordinary building sand. The material has been – and often still is – employed in various ways by believers to increase agricultural success, to improve yield in animal husbandry, to preserve the health of livestock, to discourage vermin, and as a prophylactic and medicinal therapy for a range of conditions, often determined by special association with the saint in question.

Introduction

Pulverised rock material has been used medicinally since classical times. Jade, pumice, Irish slate, gypsum, clays, chalk, marls, and Fuller's Earth have all been exploited for their supposed healing properties, as have powders produced from fossil echinoid (sea urchin) spines and belemnites (to treat a wide range of diseases including kidney and bladder stones), and prehistoric stone axes (to treat epilepsy and to restore domesticated animals to full health). We have reported previously on the link between stone powders and various secular and ecclesiastical sources.¹

The extraction of therapeutic powder by scratching the building stones of secular buildings such as town gates and town halls may be related to the ancient belief that the spirits of the deceased can inhabit localities associated with their deaths.² One of the consequences of town sieges was that death took place at town gates. Town halls were often sites where judges decided on the fates of prisoners. Thus, stones at these particular locations were more likely to be thought of as imbued with supernatural therapeutic power as a consequence of their formidable association with death.

The external walls and keystones of some medieval and renaissance churches, tombstones, and crosses, show systematically scratched surfaces as evidence of stone powder extraction, whose potential healing properties were reinforced by its consecrated origins. Powders from

church building stones represent one extreme in a continuum of 'holy' source materials, ranging from earth obtained from sites of pilgrimage to the graves and dwelling places of (mostly medieval) saints. New evidence and additional information (see below) has become available since that initial work, prompting this brief update.

The stone powder extraction points include rows of deep, boat-shaped grooves; long, small and shallow grooves (as for example at Sankt Dionysiuskirche in the German town of Belm); and cup-shaped hollows. Cup-like impact sites of bullets and other projectiles can be distinguished from those worked for stone powder, but there are examples where impact sites have been later exploited for powder extraction. Similarly, overworking is indicated by cross-cutting relationships between different generations of grooves and cups. There seem to be regional trends in the style of scratch mark exhibited by church walls, probably a function of the type of building stone encountered as well, perhaps, as local traditions.

Distribution and numbers of locations

In our earlier article we cited the distribution of the scratch marks in the Netherlands, Germany and Belgium with further examples also being known from Britain and France. Further examples are now documented from Austria, Switzerland, the Czech Republic,



Figure 1. Map showing the locations of the localities cited in the text. 1. Sint Gerlachuskerk, Houthem/St. Gerlach; 2. Sint Gerlachuskerk, Banholt; 3. Sint Catharinakerk, Montfort; 4. Goddelijke Zaligmakerkerk, Hakendover; 5. Sint Evermaruschapel, Rutten; 6. Saint Mortchapel, Haillot; 7. Camelitessenklooster, Vaals; 8. Heerle; 9. Onze Lieve Vrouw Tenhemelopnemingkerk, Prinsenbeek; 10. Woensdrecht; 11. Sint Gertrudiskerk, Vorst; 12. Lembeek; 13. Sint Ermelindiskerk, Meldert.

Denmark, Spain, Croatia, Italy, Norway, Poland, Romania, Sweden, Slovakia, Egypt, Tunisia, Turkey, Israel and even Uzbekistan. Some yield only a few examples, whilst others have great numbers of them.³ Over 210 locations displaying such scratch marks were recorded in our earlier contribution. Currently, we have found and visited more than 450 locations to verify the scratch marks they display, over 160 of which are located in the Netherlands and nearly 70 in Belgium.

Consecrated 'sand' and earth: register of sources

Often the consecrated 'sand' and earth have a relation with the saint or with his grave. Links between saints and healing have been forged over a long period of time, with special efficacy being credited to particular saints for particular diseases (usually related to an episode in the life of the saint), sites of pilgrimage, saintly relics, or memorials, amongst others.⁴ People used to consume or use various parts of the body of a holy person. Pulverized bones ascribed to saints were seen as a very valuable medicine,⁵ but understandably, it was not always easy to obtain the mortal remains of a saint.

People became satisfied with materials that had been in either direct or indirect contact with the saint in the belief that holy healing power had been subtly transferred. As substitutes and proxies they used grave-stones or earth from the graves of the holy persons.⁶ As time went on, it seems that church authorities both sanctioned this practice and introduced a more structured, 'official' approach to its enactment, as is clear from some of the examples in the list below. Also, this widening of application meant that earth from the graves of holy persons was extended to the use of general graveyard earth for its supposedly diverse curative and supernatural properties in the historical past.⁷

Current research has revealed the continued use of such materials today. A brief description of the results

follows, and a map indicating the location of each place is presented in Figure 1.

1. Sint-Gerlachuskerk in Houthem-Sint

This church, located in the Dutch province of Limburg in Houthem-Sint Gerlach (in the municipality Valkenburg aan de Geul) is dedicated to the eponymous twelfth century knight, Gerlachus (born c.1100). A biography, the *Vita Beati Gerlaci Eremytae*, giving details of the legends surrounding this saint, was written around 1227.⁸ It records how Gerlach, after having followed a military career, became a very pious Christian on the death of his wife. He undertook pilgrimages to both Rome (where he tended the sick for seven years) and Jerusalem. On his return to the Netherlands he gave up his possessions, became a hermit, and lived an extremely ascetic life of penance and austerity.

Gerlach is credited with having changed the water in a local well into wine on three separate occasions. Houthem, near Valkenburg in the southern part of Limburg, is where his original estate was located, and was the area to which he returned from his pilgrimage; it is now a regional centre of reverence dedicated to him. There is the tradition that, following his death in around 1170, numerous small miracles took place at his graveside. As a consequence, small amounts of soil were removed from his grave for therapeutic purposes in the belief that they were consecrated by the saint's presence.

This practice has taken on a more formal, structured pattern nowadays; consecrated limestone powder ('sand') is stored beneath the tomb of the saint (Figure 2) and made available to visitors for removal and use in the treatment of sick animals, mixed with corn to deter rats and mice, sprinkled in stables for the well-being of the cattle, and even added to the soil to improve crop growth. Indeed, the patronage of this particular saint is against plague and cattle diseases.



Figure 2. The tomb of Saint Gerlachus equipped with the blessed 'sand' in Houthem-Sint Gerlach (the Netherlands).



Figure 3. Bags filled with blessed 'sand' in Sint Gerlachuskerk, Banholt (the Netherlands).

2. Sint-Gerlachuskerk in Banholt

This is another church dedicated to Saint Gerlach, and is located in the municipality of Eijsden-Margraten in the Dutch province of Limburg. Here, consecrated 'sand' is made available to the faithful once a year on Saint Gerlach's Feast Day (5 January); 150 small plastic bags are filled with 'sand' and deposited for collection around the statue of the saint at the back of the church (Figure 3). In this village, the 'sand' is believed to have special efficacy for the protection of cattle and other animals against sickness and disease; the material is thrown into the stables in the belief that it will keep the cattle healthy.



Figure 4. Special bucket containing consecrated sand at Sint Catharinakerk in Montfort (the Netherlands).

3. Sint Catharinakerk in Montfort

This church is located in the municipality of Roerdalen in the Dutch province of Limburg. Saint Anthony the Great (c.251-356) was an Egyptian Christian monk, the details of whose life were recorded around 360 by Athanasius of Alexandria (c.296-373), a prominent theologian, author and Bishop of Alexandria.⁹ Anthony's remains, originally buried on the mountain on which he lived, were transferred to Alexandria in 371, and from there to Constantinople for their protection from the invading Saracens. Then, during the First Crusade in the eleventh century, they were given to Joscelin of Courtenay, Count of Edessa (died 1131) who took them to Saint-Antoine-l'Abbaye (in the Département Isère, southern France).

There, the relics were associated with various miraculous cures, particularly of ergotism, which came to

be known as 'St Anthony's fire'. The Sint Catharinakerk reveres St Anthony. In the church, sand (purchased from local builders' merchants) is placed in a bucket next to his statue (Figure 4). Parishioners and visitors are able to take the material, which is applied to the fields to increase fertility and, as with 'sand' associated with St Gerlach, used to protect cattle from sickness.



Figure 5. Store of consecrated earth at Hakendover (Belgium).

4. Goddelijke Zaligmakerkerk in Hakendover

The town of Hakendover lies to the southeast of Tienen in the Belgian province of Flemish Brabant. The town is well known because of its annual 'paardenprocessie' (horse procession) which takes place on Easter Monday. This involves the blessing of both pilgrims and animals by the priests, followed by a horse race over the fields. Pilgrims are permitted to take samples of the blessed earth from the cemetery that surrounds the church. The earth is used to protect against all kinds of evil and disaster. It is also thrown onto the fields and mixed with cattle feed. A supply of the earth is stored ready for collection in a roofed construction at the rear of Goddelijke Zaligmakerkerk (Figure 5).

5. Sint Evermaruschapel in Rutten

This chapel is located in Rutten (municipality of Tongeren) which lies in the Belgian (Flanders) province of Limburg. In the village, the Sint Evermaruschapel has a small pit in the floor of the nave, just in front of the altar (Figure 6). The pit is covered with a removable stone tile (Figure 7). The pit houses a fine-grained, powdery consecrated earth which is made available to visitors for removal. It is commonly added as a curative to the food of sick animals, as well as being thrown onto the fields to aid fertility. Believers in the efficacy of the earth also use it themselves against various diseases and discomforts; local people claim that it is beneficial for nearly every condition imaginable; one anecdote tells of the earth being particularly effective against polyps.



Figure 6. Location of the tile-covered pit just in front of the altar in the nave of Sint Evermaruskapel, Rutten (Belgium).



Figure 7. Detail of the tile-covered pit (Sint Evermaruskapel, Rutten).

Some place a sample in a small bag and keep it under the pillow at night. The caretaker of the pit obtains the earth from the meadow surrounding the chapel. Before it is consigned to the pit, the earth is sieved and any small stones are removed. The church/chapel reveres a seventh century Frisian pilgrim, St Evermarus who, along with his seven companions, was murdered by bandits at Rutten whilst they were resting after their return from a pilgrimage to Santiago de Compostella

in Spain. According to legend, the nobleman Pippin von Herstal (c.635-714) came across the bodies during one of his hunting trips, and had the corpses buried. Evermarus was canonised in 968, and a wooden chapel was built in the meadow where his remains were discovered, later (1784) replaced by a stone church.



Figure 8. The altar at Saint Mortkapel, Haillot (Belgium). Note the cavity beneath the altar where the consecrated earth is kept, plus the presence of a large stone, perhaps a menhir or standing stone.

6. Saint Mortkapel in Haillot

Haillot is a village in the municipality of Ohey which lies in the Belgian (Wallonia) province of Namur. It contains the fifteenth century chapel of Saint Mort ('the dead saint'). Apparently, a monk from Saint-Laurent near Saint-Trond called Gérard de Gingelom visited the church in 1466 and enquired about the saint. The information which he gathered was recorded in a manuscript now held in the Royal Library, Brussels.¹⁰ It tells of a woman from Antvalle (now called Andenelle) who presented her stillborn child to the Virgin Mary de la Vignette at Huy on the River Meuse, whereupon the child was quickened; it was baptised with the name 'Death'. When he grew up, the child lived the life of a hermit. At the death of his parents he gave all that he had to the poor, dedicated his life to the service of God and was well loved. Diabolically inspired bandits killed him for the riches they supposed he was hiding.

The women of Andenne determined to collect his body and take it to their church, but when the remains were loaded onto a cart, the horses could not be persuaded to move. Left to their own choice, the horses carted the body via a circuitous route over tracks and through the countryside to the church where the Saint had originally been baptised. There, he was buried between two pillars and his grave became a shrine at which many miracles of healing were attested, especially of gout, toothache and other diseases.

Visitors take the consecrated earth from a cavity under the altar (Figure 8) and add it to animal feed to preserve the health of their livestock; it is said that cows which have eaten the earth give a higher milk yield. Godefroid Petit, a priest of Saint-Mort in the middle of the sixteenth century, relates that all sorts of *ex voto* offerings were left there by visiting pilgrims. Even today, the pit is littered with children's dummies left as votive offerings by those seeking ease for their children's toothache.

Consecrated 'sand' and earth in the recent past

The use of sand and earth existed in the recent past at various locations, which include the following:

7. **Karmelietessen Klooster in Vaals:** Vaals lies in the extreme southeast of the Dutch province of Limburg. In the past the monks from the Karmelietessen Klooster (Convent of the Carmelites) sold stone powder as a medicine. Unfortunately, the convent no longer exists.
8. **Heerle:** In the town of Heerle (municipality of Roosendaal in the Dutch province of North-Brabant) parishioners were able to obtain specially blessed white sand up to the end of the last century. This so-called 'Gertrudissand' was used as a pesticide to discourage mice and rats.
9. **The Onze Lieve Vrouw Tenhemelopnemingkerk in Prinsenbeek:** In Prinsenbeek (municipality of Breda in the Dutch province of North-Brabant) there is a further association (see Heerle, above) between Saint Gertrude of Nivelles (c.621-659) and pesticidal sand. According to legend Saint Gertrude lived in Prinsenbeek and when rodents spoiled harvest, she helped them to rid the town of them.
10. **Church in Woensdrecht:** Here, in the Dutch province of North-Brabant, specially blessed 'Gertrudissand' was available for collection on 17 March (the anniversary of her death) from a bin standing at the back of the church.
11. **Sint Gertrudiskerk in Vorst:** In Vorst (in the province of Antwerp in Belgium), supplicants not only asked Saint Gertrude for help against vermin, but also to cure wounds on the nose and the lips and to get rid of eczema. It was also thought that Gertrude could help in cases of mental illness and seduction by the devil. It was also believed that Gertrude could help in times of ravaging by plague or other epidemic diseases. Pilgrims collected earth from the cemetery for a wide range of applications.
12. **Church in Lembeek:** Saint Veronus of Lembeek or Saint Vroon (died 863) is worshipped in Lembeek (in the municipality of Halle in the province of Flemish Brabant in Belgium). The saint's assistance

was sought for a variety of diseases including headaches, meningitis and fever. In the past pilgrims removed and bagged earth from a pit at the grave of the saint. The bag was then laid under the head at night in order to effect a cure. The pit was later closed but pilgrims were able to collect bags of earth from the church itself

13. **Sint Ermelindiskerk in Meldert:** The church of Saint Ermelinde in Meldert (municipality Hoe gaarden in the province Flemish Brabant in Belgium) is dedicated to the sixth-century hermitess, Ermelinda (510-590), who was very charitable to the poor, set up a hermitage in the area, and died in the town. According to legend, the staff of Saint Ermelinde sprouted into a thorn bush next to the church; parishioners collected the earth from around the bush for therapeutic purposes and agricultural blessing.

Conclusion

It is clear from the discussion above that stone powder derived from a range of ecclesiastical sources, usually tied to pilgrimage centres associated with a range of medieval saints, enjoyed considerable local popularity in Belgium and the Netherlands. Whilst the list of localities where 'sand' and earth are still used for medical or magical purposes today – or were used in the recent past for this goal – is somewhat limited, further research may yield even more examples.

Acknowledgements

We are very grateful to Rachael Pymm for critically reading the manuscript prior to submission.

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Endnotes and References

1. Weertz, J., Weertz, E. and Duffin, C.J. Possible sources of therapeutic stone powder from North West Europe. *Pharmaceutical Historian*. 2014; 44 (2): 27-32; Duffin, C.J., Weertz, J., and Weertz, E. Sources of therapeutic stone powder in Europe. In Moody, R.T.J., Duffin, C.J. And Gardner-Thorpe, C. *Geology and Medicine: Exploring the Historical Links and the Development of Public Health and Forensic Medicine*. (Celebrating the Tercennial of Sir John Hill). November 3-4 2014, Geological Society, Burlington House, Piccadilly, London. 2014: 65-67.
2. Kits Nieuwenkamp, H.W.M.J. Raadselachtige gleuven in oude kerkmuren, oude gebouwen en andere monumenten. *Oost-vlaamse Zanten*. 1960; 35e jaargang, nr. 4: 101-114.

3. German website concerning possible sources of therapeutic stone powder (with many pictures): <http://www.schabespuren.de/wetzrillen/index.php/Hauptseite>
4. Duffin, J. *Medical Miracles. Doctors, Saints and Healing in the Modern World*. Oxford: Oxford University Press, 2009.
- Freeman, C. *Holy Bones, Holy Dust: How Relics Shaped the History of Medieval Europe*. New Haven and London: Yale University Press, 2011.
5. Van der Geer, A. and Dermitzakis, M. Fossil medicines from 'snake eggs' to 'Saint's bones'; an overview. *Calicut Medical Journal*. 2008; 6(1): e8, 9.
6. Kits Nieuwenkamp, HWMJ. (Note 2) 1960: 101-114.
7. Vyse, S. *The Psychology of Superstition*. New York: Oxford University Press, 2014.
- Whyte, W. *Unlocking the Church* (*The lost secrets of Victorian sacred space*). New York: Oxford University Press, 2017.
- Thomas, K. *Religion and the Decline of Magic* (*Studies in Popular Beliefs in Sixteenth and Seventeenth Century*). New York: Oxford University Press, 1971.
8. Notten, JGM. (ed.) *Vita Beati Gerlaci Eremitae – De Heilige van het Geuldal*. Houthem: Kerkbestuur van de Parochie van de Heilige Gerlach, 1990.
9. White, C. (ed.) *Early Christian Lives*. London: Penguin, 1998.
10. Jacques, F. *Saint Mort. Sa vie, ses reliques, son pèlerinage*. Haillot: Éditions Condroz-Meuse, 1971.